



Los Angeles Regional Water Quality Control Board

Mr. Brad Michalk California Department of Parks and Recreation VIA CERTIFIED MAIL Northern Service Center One Capital Mall, Suite 410 Sacramento CA 95814

RETURN RECEIPT REOUESTED No. 7014 2870 0001 4613 6042

MODIFICATION OF CONDITIONAL WATER QUALITY CERTIFICATION FOR PROPOSED MALIBU PIER REPAIRS PROJECT, PACIFIC OCEAN, CITY OF MALIBU, LOS ANGELES COUNTY (File No. 12-150)

Dear Mr. Michalk:

We are in receipt of your notification on November 2, 2015, requesting an amendment of your Conditional Clean Water Act Section 401 Water Quality Certification for the subject project issued on January 23, 2013 (Certification). California State Parks (Applicant) is requesting to increase the number of piers to be replaced and, consequently, to increase the impacted acreage to U.S. waters permitted by the Certification. Originally 13 piers needed replacing; upon further investigation, 95 piers need replacing. In addition, the Applicant has provided additional project information including:

- Forty-one (41) piles are being replaced now as an emergency due to the potential for winter El Nino storms (Phase 1) with in-water work beginning in January 2016. The remaining pile repairs or replacements will be completed in 2016-2017, as funds permit (Phase 2);
- The history of the pier repair needs;
- The steel bracing framework installed around the decking to halt the collapse of the pier. The current extent of the pier deterioration required this element;
- Conditions of the California Coastal Commission Coastal Development Permit, California Department of Fish and Wildlife discussions, and U.S. Army Corps of Engineers 404 Permit which were incorporated into the updated project description;
- Extension of the project timeline.

In response to your request the following will read as (deleted language in strikeout, new language underlined):

Attachment A, *Item 1. Applicant* will read:

California State Parks 1925 Las Virgenes Road Calabasas, CA 91302

Phone: (818) 880-0365 Fax: (818) 880-6165

Tom-Dore

Mr. Brad Michalk
California Department of Parks and Recreation
Northern Service Center
One Capital Mall, Suite 410
Sacramento CA 95814

Phone: (916) 445-8783

Attachment A, Item 7, Project Description will read:

7. Project Description

The historic Malibu Pier consists of a framework of 164 wooden pilings. Currently thirteen (13) piles are either broken, missing, or have become deteriorated by rotting. These 13 piles need immediate replacement and there are others in "fair" or "poor" condition, which will need replacement after the original phase of replacing the damaged pilings.

Currently, the existing piles are either fiberglass-wrapped bare wood or treated with crossote. The new replacement pilings will be fiberglass-wrapped wood. The fiberglass treatment is considerably more expensive than traditional methods, but not necessarily longer-lasting. The treatment process allows for the pier aesthetics to remain as close to the historical appearance with the wood pilings as possible. The fiberglass

wrapping process will take place within the staging area and then the installation will take place by pile driving them in the original pile locations.

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The Malibu Pier (pier) is located in the City of Malibu, and just east of the Malibu Lagoon within Malibu Lagoon State Beach. The pier was constructed in 1897, expanded in 1906, and is a highly-visited historic California icon. The Malibu Pier is also listed as a California Point of Historical Interest and appears eligible for the National Register of Historic Places.

California Department of Parks and Recreation (Parks) and the pier lessee determined that there was a need to repair portions of the pier in 2010-12. Thirteen piles and the associated bents and bracing were identified for prioritized repair, although it was anticipated additional repairs would be needed. A review under the California Environmental Quality Act was conducted and project permits were received. State funding to complete the work did not materialize and the repairs were not initiated.

The pier was subsequently damaged by a large storm in September 2014 (Pacific Hurricane Marie). Immediately following the storm damage, engineering consultants were hired to evaluate the structural integrity and safety of the pier. Engineering surveys concluded that the pier was severely weakened by the storm and could experience a potential collapse of the most vulnerable sections in a future storm event. The strength and characteristics of future storms including wave direction and intensity cannot be known. Project engineers are not able to predict how long the pier will be able remain intact. Therefore the completion of the pier structural survey, design alternatives, and a set of plans and specifications have been developed.

As a strong storm El Nino season is predicted, it is imperative that repair work to the Malibu Pier is completed as soon as possible. For this reason, The Applicant has determined that immediate repair of 41 piles, and the associated bents and bracing, must be pursued as an emergency action. A contract for the emergency repair was awarded the first week of November 2015.

The remaining pier elements (an additional 54 pilings and associated bents and bracing) will be addressed in the future as Phase 2. It is the intent of the Applicant to complete the Phase 2 work in 2016-2017, if the required funding is available.

The engineering survey conducted immediately after the storm damage identified approximately 41 piles that were either completely missing or provide limited to no structural support (Phase 1 of the project). In some of the weakest sections. which normally consist of approximately four to five piles connected with bracing, up to 75 percent of the piles were either missing or in need of replacement. These weakened sections continue to put additional burden on adjacent sections, making those sections more likely to fail. Pier sections (also known as bents) 12 through 33 are the weakest and have been identified as requiring immediate repair. It should be noted that while other sections of the pier (bents 1 through 11 and 34 through 41) are also in need of repair, engineers have determined that these repairs could be done later without significant risk and, as such, these repairs are part of the Phase 2 Repairs.

As an interim safety precaution, the Applicant has installed fencing on the pier to direct pedestrian and vehicle traffic around the weakest sections. The Applicant has also directed staff to close the pier prior to any sizeable forecasted storm event to protect park visitors from potential harm.

Additional weakening from storm activity also has the potential to adversely affect the integrity of the historic structure.

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The emergency repair work to the Malibu Pier is referenced as Phase 1 and focuses solely on the structural deficiencies between bents 12 and 33. The work will include replacing missing or damaged piles (up to 41), bents and bracing. Phase 2 will address less urgent repairs between bents 1-22, and 34-41, which includes an estimated 54 piles. The description of the work below encompasses both Phase 1 and Phase 2 work unless otherwise noted.

The piles will be pressure treated with either CCA (chrome copper arsenate), ACA (ammoniacal copper arsenate) or ACZA (ammoniacal copper zinc arsenate). All replacement piles will also be completely encapsulated with a coating of polyurea or wrapped in fiberglass to protect the piles from the harsh environment of the ocean, and the ocean environment from the effects of the chemical treatment. All coatings and wraps on replacement poles would be applied offsite. The exterior color of the material will be a shade of brown similar to that found on telephone poles.

Steel H beams will be temporarily laid on the decking surface at five locations spanning bents 22-24 and 26-29 where missing poles are at risk failure. The weakest sections of the pier will be supported by the steel H beams, which transfer deck loads to the nearest viable support piles. Temporary fencing will be erected around the beams to exclude the public from the work area. As the repair work progresses the steel beams will be removed.

All work is expected to occur from the deck of the pier and not from a vessel below the pier. In order to reach the vertical piles that support the pier, the

walking surface (decking) will need to be removed by removing the large nails that hold them in place. Once the nails have been removed, the decking will be removed and the pile caps exposed. The pile cap will likely need to be removed in an effort to provide access to the vertical piles. The pile caps are attached to the piles by means of heavy steel brackets (with holts and nuts) and round steel shear pins. Once the pile cap is removed, the contractor will be able to fully access the piles for replacement or repair. During pile replacement activities, a crane will extract piles intact from the sea floor. In the event a pile cannot be removed intact due to the condition of the wood, the pile will be cut by a diver using a saw to cut the pile off near or beneath the mud line. If the existing piles need to be repaired, then the repair will occur below the waterline on the iobsite.

Onsite equipment is anticipated to include semitractor trailers, forklifts, a tracked crane, rubbertired dollies, and various hand tools (including, but not limited to, handsaws, drills, chainsaws, grinders and jacks). The semi-tractor trailers will haul the pier repair materials from the adjacent storage yard to the work area. A small forklift will load and unload materials, which will be transported down the pier by rubber-tired dollies. A large tracked crane with pile driving capabilities will used to remove and install pier components under the decking. The pile driving attachment on the crane will likely be a 4000-pound falling hammer.

Staging will occur in the adjacent Applicant parking lot located to the east of the Malibu Pier. Up to half of the lot may be used at any time, retaining the remaining area for public use. The existing boat hoist system will remain functional. During emergency repair work, the pier will be open to public access via a bypass pedestrian

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

12-150 Malibu Pier Repairs Amendment

walkway with appropriate barricades, directional signs and warning signs.

I have determined that the above-proposed modifications do not constitute a significant change in the nature or scope of the activities described for the project in your original application. Therefore, all of the proposed modifications are hereby incorporated into 401 Certification No. 07-131 and no additional action by this agency pursuant to Section 401 of the Clean Water Act is necessary. This determination is limited to the proposed modifications contained in your notification to this Regional Board dated October 8, 2008 and described herein, and does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this certification action, please contact Dana Cole, Section 401 Program, at (213) 576-6759.

Sincerely,

Samuel Unger, P.E.

Attached: Distribution List

Executive Officer

Dec 18, 20,5

Date

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